

Appl. No. : 09/830,634
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

On page 2, full paragraph:

A multilayered connection plate on polyimide base comprising layers of polyimide film having conductive paths placed on both surfaces of every layer is also known. In order to couple conductors, a metallized through holes 0.1 mm in diameter are formed within every layer. For connecting the layers electrically and mechanically into a multilayered printed circuit plate with the single conductor spreading topology are used specifically formed metallized through holes about 1.5 mm in diameter arranged in the form of matrix with a regular pitch common for all layers which form, after aligning, the matrix of channels piercing the multilayered plate throughout. The conductors and metallized holes are formed by methods of lithography and spraying the metallization with a subsequent galvanic build-up to a required thickness and tinning those places in which should be soldered joints. Assembling the layers into a multilayered structure is performed by soldering the joints between the metallized through holes with the methods of vacuum soldering (Панов Е.Н. Особенности сборки специализированных БИС на базовых матричных кристаллах. М.: “Высшая школа”, 1990. С. 31-34. -]Panov E.N. The peculiarities of assembling the specialized LSIC on basic matrix chips. Moscow: “Vysshaya Shkola”, 1990. Pp. 31-34).

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On page 3, paragraph beginning three lines from the bottom of the page through page 4, eighth line:

The closest technical solution to the present invention by the technical essence and achieved result is a multilayered connection plate based on polyimide, comprising dielectric layers having conductive paths formed on their sur-

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faces, and forming connection layers of the multilayered plate, and also contact nodes made in the form of soldered joints of aligned metallized holes in the connection layers, the nodes performing an inter-layer connection of conductive paths placed both on adjacent and remote connection layers (Панов Е.Н. Особенности сборки специализированных БИС на базовых матричных кристаллах. М.: "Высшая школа", 1990. С. 16-34.]Panov E.N. The peculiarities of assembling the specialized LSIC on basic matrix chips. Moscow: "Vysshaya Shkola", 1990. Pp. 16-34).

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ABSTRACT

A multilayered switching structure is disclosed for the development and the production of an apparatus based on microelectronic components and semiconductor devices. The structure may widely be used in the production of multilayered printed circuit cards and switching structures for monocrystalline modules. The multilayered switching structure includes a plurality of layers of a dielectric material which include electroconductive tracks on their surfaces and which consist of switching layers. This structure also includes contact nodes consisting of metallized contacts which are aligned with each other and which are electrically and mechanically connected together by an electroconductive binding material. The contact nodes are made in the form of splices arranged between the contacts. In a second embodiment, the multilayered switching plate includes electroconductive tracks provided on both sides of each switching layer and are connected together within the limits of each layer by metallized junction openings.